

SUBCOMMITTEE CHAIRMAN JIM HIMES
STRATEGIC TECHNOLOGY AND ADVANCED RESEARCH
SUBCOMMITTEE
HOUSE PERMANENT SELECT COMMITTEE ON INTELLIGENCE HEARING
Emerging Technologies and National Security: Posturing the U.S.
Intelligence Community for Success
February 12, 2020

[GAVEL]

The Subcommittee will come to order.

Before we begin, I want to remind all of our Members that we are in OPEN session, and as such we will discuss UNCLASSIFIED matters only.

Without objection, the chair may declare a recess at any time.

SUBCOMMITTEE CHAIR AND RANKING OPENING STATEMENTS

I welcome our Members and witnesses to the today's hearing.

[TURN PAGE FOR OPENING]

When our Subcommittee was created a year ago, we were handed a challenging responsibility: focus on, oversee and evaluate the Intelligence Community's development and use of emerging and advanced technologies. This challenge is as important to our safety and to our prosperity as it is historically resonant with those who remember the triumphs and failures of our recent history.

America got it right when we mobilized the best talent in the world behind the Manhattan Project to make sure that the forces of freedom developed nuclear technology before the fascists could. We got it wrong in 1957 when millions of Americans watched a Soviet satellite pass over their homes and communities time and time again. Since then, a consistent technological edge has kept us safe and created a technology economy our grandparents couldn't have dreamed of.

Today, artificial intelligence, fifth-generation wireless, quantum computing and biosynthesis offer science-fiction like promise, but also the possibility of game-changing, possibly existential threats. Will we lead in the development of these technologies, or will we be ambushed, Sputnik-like, by a cataclysmic technological surprise?

Measured by investment alone, our efforts are cause for concern. Federal funding for research and development as a percentage of gross

domestic product has declined from over 2 percent in the 1970s to .07 percent in 2018. Meanwhile, competitors such as China have dramatically increased the amount they spend on research and development, even as, in China's case, they educate their people, recruit the world's scientists and steal critical intellectual property.

As policymakers consider this challenge, we need to look beyond mere dollars. Government is far more complex and bureaucratic than it was during the Manhattan Project. The private sector is now driving innovation in almost every sphere. The procurement process, which links the two, is famously challenging, time-consuming and generally off-putting to private sector innovators.

Similarly, leveraging the brainpower of American academics and scholars is a complicated bureaucratic endeavor. In order to harness the best innovative minds distributed throughout the U.S. economy, the government may need to make changes to these processes.

Even keeping our most precious secrets, which used to involve simply locking a safe, is today much more challenging.

To be sure, there are bright spots: the Defense Advanced Research Projects Agency and the Intelligence Advanced Research Projects Activity fill a critical gap between basic research and operational

implementation for the federal government. Similarly, the famed national laboratories are treasures that leverage the benefits of the private sector – higher salaries and diverse customer sets, perhaps most notably – to aid federal agencies in some of their most important research and development work.

Finally, winning isn't everything. We were fortunate to beat the fascist powers to nuclear weaponry. But the Soviets tested an atom bomb four years after the Manhattan Project. CRISPR gene-editing machines are everywhere today. The most powerful artificial intelligence won't be a lot harder to copy, trade or steal than any other software. In the long-run technological know-how spreads quickly.

It is therefore critical that the United States double down on leading the world in the establishment of ethics and international norms that guide the way we think about and use these incredible technologies.

While we may not be able to outspend or outman our competitors, we can – and must – do what we've always done: lead, and work to create a better and safer world. I trust our witnesses today will help us do that.

With that, I recognize the Ranking Member for any opening statement he wishes to make.